

# Critical Pedagogy and the Knowledge Wars of the Twenty-First Century

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We live in nasty and perilous times. Those of us in critical pedagogy cannot help but despair as we watch the U.S. and its Western collaborators instigate imperial wars for geopolitical positioning and natural resources, and mega-corporations develop and spend billions of dollars to justify economic strategies that simply take money from the weakest and poorest peoples of the world and transfer them to the richest people in North America and Europe. In this context, the politics of knowledge become a central issue in the educational and social domains of every nation in the world. The politics of knowledge firmly entrenched around the planet are characterized by a few rich individuals and transnational corporations controlling most of the “validated” data we can access. Thankfully, there is a rich source of counter-data on the Internet and several book publishers and journals — but students and other people are warned about the politicized nature of this information. Thus, many individuals are exposed over and over again to phony rationalizations for indefensible governmental, military, financial, and social actions of power wielders in the U.S. and its Western allies. The Iraqi War, as merely one example, is not simply a story about a brutal and unnecessary policy, but a chronicle of the way the knowledge war operates in the twenty-first century.

Those who wage the war employ the authority of science and media to spread a plethora of great untruths about Iraq’s danger to the world and the necessity of continuing military action against the “nation.” As I write this, they deploy the same type of knowledge tactics against Iran. The power of such knowledge work is at times overwhelming as millions of individuals in the U.S. and around the world have been profoundly influenced by such misleading information. Those of us in critical pedagogy find it hard to believe that such lies and misrepresentations could still have credibility years after they had been exposed, but, just as an

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example, nearly one-third of the people in the contemporary U.S. still believe that Saddam Hussein's regime possessed WMDs, was responsible for 9-11, and had prepared to leave American cities under a mushroom cloud. Such a crazy politics of knowledge tells us that something is deeply wrong with not only the ethical behavior and sanity of power wielders, but that one of the most powerful weapons in their multidimensional and frightening arsenal is their ownership of much of the world's knowledge. In this context, contemporary standardized educational systems contribute to the imperial task as they pass along the official verities of the regime and promote its sociopolitical and economic interests. The focus of this essay involves analyzing the ways critical pedagogy might conceptualize and enact a response to the knowledge wars being waged against peoples in North America, Australia, New Zealand and Europe; marginalized peoples living in these regions; and the most destitute peoples living around the world.

## The West Works to Gain Multi-level Supremacy Over the Rest of the World

The politics of knowledge and the contemporary knowledge wars cannot be separated from the relationship between the epistemological, ontological, the political economic, and the ideological. All four of these domains constantly interact in a synergistic manner to shape the nature of the knowledge produced by Western power wielders in the contemporary era. Utilizing a crypto-positivistic, evidence-based science that excludes complexity; context; power; multiple modes of research design; the ever-changing, in-process nature of the phenomena of the social world; subjugated and indigenous knowledges from diverse social and geographical locales; and the multiple realities perceived and constructed by different peoples at divergent historical times and cultural places, dominant power brokers attempt with a great deal of success to regulate what people view as legitimate knowledge. There is no way around it; the task of the critical pedagogue as teacher, researcher, and knowledge worker is profoundly complex and demanding in our proto-fascist era. I hate to use the word *fascist* because of the accusations of overstatement that it will evoke, but at this historical point I sense that we can no longer avoid it.

The neo-liberal, market-driven, and crypto-fascist logic of the contemporary Western empire with its “recovered” forms of white supremacy, patriarchy, class politics, homophobia, and fundamentalist Christian intolerance represents a new “fall of Western civilization.” We are all affected by the fact that as a culture “we have fallen and we can’t get up,” and in this context our critiques of hegemonic knowledges constitute just one aspect of a larger effort to “get well,” to mend our psyches that have been broken in this social descent (Sardar, 1999; Nelson, 2000). As I visit North American schools and study the curricula taught in most of them, I am reminded yet again of the preparation of young pioneers for the empire. The superiority of the European heritage, Christianity, and Western knowledges

are now firmly re-entrenched. The notion that we might study the knowledges or entertain the perspectives of peoples from other cultures, religions, or ideological perspectives is quickly fading like the Morning Star as the sun rises over Falujah.

Along with geo-political, military, political economic and other forms of power, the power of knowledge (episto-power) plays its role in reinforcing these other forms of power by placing the various peoples of North America, Europe, and the rest of the world into hierarchical categories. Poor people, individuals from Diasporas from the most economically depressed parts of the world, and residents of the “developing countries” are positioned on these hierarchies as less intelligent, less civilized, and more barbaric than upper-middle class, white, Christian, and often male Westerners. The superiority of those who fall under the parasol of dominant positionality is made so obvious by educational and other social institutions that everyone knows where they fit on the status ladder. This knowing where one fits on the ladder does great harm — obviously to those who at the bottom rungs who feel inferior — but also to those at the top rungs who develop a sense of privilege and superiority (Weiler, 2004). It is the charge of critical pedagogy to throw a monkey wrench into a system of knowledge — an episteme as Foucault labeled his regime of truth — that perpetuates such perspectives and the human suffering that accompanies them.

### Diversality: The Dire Need for Different Perspectives, for Multiple Forms of Knowledge in the Effort to Expose and Resist the New Empire

A key task of critical pedagogy involves helping people understand the ideological and epistemological inscriptions on the ways of seeing promoted by the dominant power blocs of the West. In such work, criticalists uncover both old and new knowledges that stimulate our ethical, ideological, and pedagogical imagination to change our relationship with the world and other people. Concurrently, such critical labor facilitates the construction of a new mode of emancipation derived from our understandings of the successes and failures of the past and the present. Such an undertaking is essential to the planet’s survival at this moment in history. In the last years of the first decade of the twenty-first century, the hegemonic politics of knowledge and the crypto-positivistic epistemology that is its conjoined twin are destroying the world.

As I write these words, I feel as if I’ve been magically positioned in a 1950s sci-fi movie in which the people of the earth mobilize to fight off their destruction. Of course, it is not the lizard people from the planet Enyon that threaten us; it is the power wielders of the West with their free market economic policies, geo-political military actions, and the episto-rays of consciousness constructing information that we must confront. Dominant crypto-positivist modes of these episto-rays are the most difficult of the tools of hegemonic power to recognize. They travel

under the cover of phrases such as “scientific proof” and other high status monikers. Flying under the public radar of perception, they justify murder in the name of national security and ecological devastation in the name of economic growth. Such “knowledge weapons” help deaden our ethical senses and compassion for those harmed by transnational economic scams, and Eurocentric and Americocentric ways of seeing that subvert the development of a critical consciousness. Indeed, the episto-rays move us to support — under the flag of high standards — schools that obscure more than enlighten.

Our critical pedagogical effort to thwart these power plays, I believe, involves engaging in a transformative multilogicality. By this, I refer to gaining the capability and the resolve to explore the world not from the Western imperial vantage point but from diverse perspectives — often standpoints forged by pain, suffering, and degradation. The imperial, neo-liberal rationalization for the construction of a planetary empire ruled by the U.S. and its collaborators is grotesquely disturbing to hundreds of millions of people around the world. Given the flagrance of the imperial abuses and the perversity of the Iraqi War, more and more Westerners are beginning to understand the brutality of the military violence, the material disparity, and the ecological harm that such policies and knowledges create. The empire’s neo-liberal adulation of market-driven modes of sociopolitical and educational organization shapes its efforts to adjust children and youth to their imperial roles as human capital and cannon fodder for the wars of geo-political advantage and resources demanded by the needs of the imperial machine.

Key to the multilogical critical pedagogy advocated here is the notion that while theoretical and knowledge frameworks help elucidate phenomena, they also work to mystify our understanding of them. This is one of the reasons that I have worked so hard to develop the concept of the bricolage delineated by Norman Denzin and Yvonna Lincoln (2000) in a critical context (Kincheloe, 2001a; Kincheloe & Berry, 2004; Kincheloe, 2005a). Bricolage involves the process of rigorously rethinking and reconceptualizing multidisciplinary research. Ethnography, textual analysis, semiotics, hermeneutics, psychoanalysis, phenomenology, historiography, discourse analysis combined with philosophical analysis, literary analysis, aesthetic criticism, and theatrical and dramatic ways of observing and making meaning typically constitute the methodological bricolage. Employing these multiperspectival (Kellner, 1995) dynamics, bricoleurs transcend the parochial blinders of mono-disciplinary approaches and open new windows onto the world of research and knowledge production.

In the contemporary domain, bricolage is usually understood to involve the process of employing these methodological strategies when the need arises in fluid research situations. In the critical articulation of the bricolage, I contend that qualitative researchers move beyond mere interdisciplinarity as it refers to research designs and methodologies, and move to a new conceptual domain. Bricoleurs employing a variety of research methodologies must also employ a variety of theoretical insights coming obviously from a deep understanding of critical

theory as well as feminist theory, social theory from diverse geographical places, anti-racist theories, class theories, post-structuralism, complexity and chaos theories, queer theory, and post/anti-colonial theories. This, of course, is a lot to ask of critical scholars/activists, but perilous times demand great commitment. Such multidisciplinary insight and theoretical dexterity helps researchers not only gain a more rigorous (not in the positivistic sense) view of the world but also a new mode of researcher self-awareness.

Critical bricoleurs understand the diverse contexts in which any knowledge producer operates. Transformative researchers struggle to uncover the insidious ways that dominant power blocs work to shape the knowledge they produce, they begin to better understand the relationship between any researcher's ways of seeing and the social location of her personal history. As the bricoleur appreciates the ways that research is a power-inscribed activity, she abandons the quixotic quest for some naïve mode of realism. At this point, the bricoleur concentrates on the expose of the multiple ways power harms individuals and groups and the way a knowledge producer's location in the web of reality helps shape the production, interpretation, and consumption of data. At every space, the critical bricoleur discerns new ways that a hegemonic epistemology in league with a dominant power-soaked politics of knowledge operates to privilege the privileged and further marginalize the marginalized.

In the context of the critical bricolage, the power of difference, of diverse perspectives, and of insights coming from different locales in the web of reality reveal their significance. All of these worldviews — especially when they are juxtaposed in dialogue with one another — contribute to our understanding of the world in general and the oppression that leads to human suffering in particular. Such diversal knowledges enhance our socio-political and educational imagination and our ability to imagine new ways of seeing and being and interacting with other people and the physical world. I believe that a multilogical critical pedagogy can lead the way to these new social, ideological, epistemological, ontological, and cognitive domains. So-called "primitive peoples" were much more influenced by the unconscious dimension of the human mind than modern Western peoples. In many ways such Western distancing from the subconscious may lead to forms of disconnection with the world and its people that undermine the psychological and cognitive well being of contemporary, highly educated people from dominant cultural backgrounds.

In the engagement with diverse knowledges promoted by the critical bricolage, critical pedagogues attempt to reengage with these ancient indigenous knowledges in the process integrating them with political economic, socio-cultural, and pedagogical insights. The outcomes can be profoundly transformative on both an individual and a social scale. Indeed, the thanocentric impulses of contemporary Western ideological orientations and actions demand a form of social psychoanalysis (Kincheloe and Pinar, 1991) that can repair the social unconsciousness of the West. Diversal knowledges —ancient indigenous and other

types — can help in this therapeutic process. As contemporary Westerners stare into what Mr. Lahey from the Canadian TV series “Trailer Park Boys” would call the “shit abyss,” there is a great need for alternative ontologies, epistemologies, cosmologies, and ideologies to which they can compare their present views of self and world. In the interaction with the diverse ways of thinking, Westerners and Western educators can begin to develop an eros to counter the dead end thanatos of the empire.

## Diversity with a Critical Foundation

In an era of imperial wars and concomitant information control to elicit support for such “preemptive strikes,” critical pedagogues need to develop knotholes in the center field fence through which teachers, students, and other individuals can view unregulated pictures of socio-cultural reality. The public’s consciousness is shaped just as much by what is not perceived as it is by what is. This is why diverse knowledges are so important in this time and place. Critical pedagogues explore data from Asia, Africa, Latin America, the Islamic World, the oppressed in North America, Australia, New Zealand, and Europe, and indigenous communities around the world. In this context, we attempt to construct a political economic ecology of knowledges that lead to new ways of seeing and being. Simply in the act of attending to and learning from the insights of marginalized peoples, we operate as allies in their struggle against the oppression of Western power blocs. Such support cannot be separated from the necessity of white, upper middle class, male Westerners to step back and examine the effects of their own immersion in such a politics of knowledge.

As we understand the compelling perceptions of indigenous peoples, we can gain new vantage points on the sentient and mysterious life force that inhabits both our being and the cosmos surrounding us. The insights peoples from diverse cultural and historical locales in the web of reality have accessed about this life force in unconscious and other states of consciousness should be a source of fascination and study by scholars from a wide variety of academic domains, critical pedagogy being merely one of many. Yet, this often does not happen because of the crypto-positivistic stigma attached to the exploration of such yet to be understood domains. The intelligence of the earth — which may simply be a pale reflection of the intelligence of the universe — is not something that mainstream scholars are ready to discuss. The insights we may gain from connecting to such a larger cognitive force — insights often appreciated by indigenous peoples more than Western scholars — can become one of the most important dimensions of emancipatory knowledge work of the future. This is one of the dimensions of the value of the work of Humberto Maturana and Francisco Varela (1987) in their work on life as a cognitive process (see Kincheloe, 2004a for an expansion of the relation of this work to criticality).

Thus, again and again we confront the power of difference, alterity, and diversality by pushing critical theory and critical pedagogy to a more intellectually rigorous and in turn praxiologically powerful position. A critically complex and diversal critical pedagogy is simply better equipped to confront those waging a knowledge war against the world in the twenty-first century. The power of diverse perspectives is, thankfully, recognized by more and more scholars who appreciate the notion that forms of cultural renewal can come from places long viewed as irrelevant and peripheral to Western power wielders. In this diversal domain, we become more capable of critically scrutinizing the process of imperial political economic, geopolitical, and epistemological globalization. In this process, criticalists also monitor the role that all levels of education play in this imperial process in order to develop more pragmatic strategies for transformative intervention. Elementary and secondary schools as well as colleges and universities must become “trading zones” of intercultural exchange and global meeting places.

This, of course, is a central goal of the Paulo and Nita Freire International Project for Critical Pedagogy at McGill University. As cultural and epistemological crossroads, the purpose of schools in a global world would forever be transformed. The politics of knowledge would become a central dimension of any curriculum, and the contrast and comparison of different cultural perspectives on a wide array of issues would emerge as a familiar aspect of the study of any topic. In such a transformed diversal education, critical pedagogues would establish working relationships with scholars and schools around the world. Such educators would seek the help of scholars from educational institutions in developing nations who have already begun to challenge hegemonic systems of Western knowledge. The curricula these innovative scholars have developed by incorporating subjugated knowledges of their own and other cultures can profoundly help critical educators from all parts of the world rethink, diversalize, and revitalize existing pedagogies (Nandy, 2000; Weiler, 2004; Orelus, 2007).

### The Critical Bricolage vis-à-vis Diversality: Enhancing Agency in a Socially Constructed World

Such proposals represent a sea change in the everyday teaching, learning, and knowledge production of all educational institutions. The moribund status quo is no longer acceptable — not that it ever was. The bricolage in this context becomes a central research/epistemological/theoretical motif for incorporating the diversal intersections of knowledges that would be welcomed into schools of all types. The hidden positivism that insidiously shapes so much of Western curriculum, instruction, and research is remarkably uninterested in the contexts and processes of which a phenomenon is a part — dynamics that I and many other researchers find essential to the study and understanding of any topic imaginable. It should not be surprising that insight into the contexts and processes of which phenomena are a part often help explain the role that dominant power blocs play in shaping them.

Thus, the dismissal of context and process is often an insidious and effective way of hiding the influence of dominant power and maintaining the status quo. A critical form of hermeneutics and textual analysis counters such crypto-positivist tactics, using context and process to undermine the easy production of *universal* knowledge of the reductionist tradition of research. When phenomena are viewed within the contexts and processes that have shaped both them and the consciousness of the individual observing them, a far more complex picture begins to emerge. An awareness of the contexts and processes in which a phenomenon takes place and the contexts and processes in which an observer of the phenomenon is located provides us profoundly divergent understandings and perspectives on the entity. In the knowledge wars of the contemporary era, such epistemological insights are “dangerous,” as they expose the way episto-power operates to exclude diversality from curricula and public knowledge (Clark, 2001; Marcel, 2001).

Employing the bricolage vis-à-vis diversality will inevitably promote paradox where there is certainty, open-endedness where there is finality, multiple perspectives where there is one correct answer, insight into ideological and cultural inscription where there is objectivity, and defamiliarization where there is comfort and security. In a sense the type of knowledge work produced by the bricolage vis-à-vis diversality creates research narratives without endings. Closure simply can’t take place when we know that phenomena are always in process, and that as times and locales change the ways we understand them also changes. Thus, our critical knowledge work offers insights from this point in time and from this particular ideological/cultural perspective. Such a positioning of our work does not weaken it — to the contrary, it makes it stronger, more in touch with the ways the world, the mind, epistemology, and ontology operate.

When we view a Western social organization for the first time, for example, from the perspective of a marginalized individual who has experienced a form of existential death at the hands of the institution, we have crawled through a new conceptual wormhole in our effort to make sense of the phenomenon in question. Such an insight destroys any notion of closure we might have had. In these situations we have been touched by Walter Benjamin’s Angel of History in a way that forever changes us, the knowledge we generate, and the reasons we produce it in the first place. This is how the bricolage vis-à-vis diversality works — it refuses to allow us to be content with monological and monocultural perspectives. It places abrasive grains of epistemological sand in our pants and makes us uncomfortable with reductionism and its consequences.

A key anti-hegemonic dimension of the bricolage vis-à-vis diversality is that it alerts us to the ways contexts, processes, and relationships shape both the phenomena of the world and consciousness itself. This is a powerful and life-changing insight that must always be coupled with the appreciation that humans have agency — they do not have to be pawns that passively submit to the demands of dominant power. As many critical social theorists have maintained, this agency

doesn't mean that people can just simply do what they want. These contexts, processes, and relationships — always inscribed by dominant forms of power — construct a playing field on which human agents operate. Thus, human activity is influenced by such dynamics but not determined. As individuals begin to understand this power-related and socially constructed dimension of the world, they sometimes feel like refugees in relation to the hegemonic cosmos to which they can never return. Critical pedagogy, of course, maintains that we don't have to live like refugees, as we re-construct the world and create new, shared spaces with individuals from diverse places around the world.

In any critical orientation, researchers, educators, and activists always have to be careful of inadvertently endorsing structural modes of determinism. The failure to recognize human agency in the struggle for justice and in the knowledge wars of the contemporary era is to create nihilistic forms of pedagogy and cultural work. The critical bricolage viewed in this context is literally the toolbox from which critical teachers and cultural workers draw to better understand the hegemonic mystifications of dominant power blocs in the contemporary world. While existing tools can be and are used for valuable effect, an evolving notion of criticality (see Kincheloe, 2008) attempts to create the most rigorous and useful forms of knowledge work and social activism possible. All critical teachers and cultural workers must become adept hermeneuts who hone their ability to make sense of the diverse and complex forces at work in divergent situations. Concurrently, they gain the ability to identify and discern the effects of where they are situated in diverse social and political frameworks. In this same interpretive context, critical bricoleurs acting on their understanding of diversality deploy their interpretive skills in the effort to make sense of the way members of dominant power blocs from race, class, gender, sexual, colonial, and religious perspectives see the world and rationalize their often oppressive actions. In previous work on race, class, and gender (Kincheloe and Steinberg, 1997) on whiteness and racism (Kincheloe, Steinberg, Rodriguez, and Chennault, 1998), patriarchy (Kincheloe, 2001b), and dominant economic constructs (Kincheloe and Steinberg, 2007), my colleagues and I have attempted to understand not only the nature of oppression and its effects on the oppressed, but also the knowledge frameworks and cognitive/affectionate matrixes that shape both the consciousness and actions of members of dominant groups whose deeds often perpetuate subjugation. In this complex context, critical bricoleurs always examine such sociopolitical and pedagogical dynamics within the interaction of relationship and individuality (Steinberg, 2006).

There is no universal formula for such interaction — indeed, each encounter is idiosyncratic and erratic. Although we may recognize tendencies, we cannot count on regularity or consistency in such complex encounters. We must study each situation as a unique occurrence with diverse players, divergent contexts and processes, and distinct outcomes. The critical bricolage vis-à-vis diversality presents a transformative, anti-hegemonic view zealous in its effort to address and end oppression but concurrently nuanced in its understanding of the slippery

relationship between agency and structure. Human beings do not fade away into the ice fog of power structures. The process of social construction is always a co-constructive process as individual and structure create one another. As agential beings who make our way through the ice fog, individuals who grasp the critical complex insights to power, agency, knowledge, and action delineated here, criticalists understand that they have to rethink what they are going to do the rest of their lives. Previously operating in only limited dimensions of reality, they had not been faced with the ethical and ideological decisions now placed before them in the multilogical domains they have entered. At this moment they realize that there is nothing easy about living in a critical manner, about living critical pedagogy (Faulconer and Williams, 1985; Livezey, 1988; Marcel, 2001).

## The Politics of Knowledge in the Empire: The Continuing Crisis of Knowledge

Since the time of Rene Descartes in the seventeenth century, many Western knowledge producers have held up their notion of reason and research as the one pathway to enlightenment and emancipation from ignorance. In the contemporary era, the dominant imperial politics of knowledge want to recover this one universal pathway to truth via the reassertion of positivist logic. Evidence-based research has become a code word for a kind of crypto-positivism that, like a CIA operative, always maintains “plausible deniability” that it is not really positivism. As referenced earlier, the decontextualizing dimensions of this crypto-positivism often works effectively to uphold the status quo, a Bush-Harper-Howard reality. These politics of knowledge become even more important in an era where privatization and corporatization of education becomes a key dimension of the public conversation about schooling and more and more of an actual reality.

In higher education, the self-direction and independence of colleges and universities have already been compromised by corporate influences. Every day that passes witnesses new forms of dependency on corporate support and funding as governments back away from fiscal support of higher education. The fact that a pharmaceutical company pays for research on the effectiveness of particular drugs is part of the context that often shapes the nature of the knowledge that is produced. If researchers know that their multi-million dollar corporately-funded center may be closed down if they produce data at odds with the fiscal interests of the funding agency, they may find it hard not to be influenced by such pressure.

Knowledge is never free and unconnected to diverse power blocs because it is always produced as part of a web of power relationships. In corporate hyper-reality, these power matrixes become even more complex and interwoven into every dimension of the social order with the development of diverse knowledge technologies that disperse corporatized data everyday around the clock. Thus, the ghosts of the new and improved Western empire constantly haunt us with both cognitively directed information and affectively aimed images and representa-

tions designed to win our consent to the needs of capital and dominant power. The hobgoblins of the imperial mind are omnipresent and they have become so adept at producing hegemonic data that most individuals are unable to recognize ideologically charged information when they consume it. The twenty-first century imperial politics of knowledge flies under the radar like a B-2 Spirit stealth bomber dropping epistemological “payloads” on domestic and foreign targets.

In the everyday life of universities, these critical insights into the politics of knowledge are still not a typical aspect of the conversation about the institutional research mission. The idea that the production and mediation of information in higher education is a highly politicized process demanding careful monitoring of the ideological interests involved is still unwelcome in academic circles. Most researchers, politicians, and educators still live in a state of denial about the political dimension to knowledge production and the relationship between validated information and the international purveyors of economic power. One is inseparable from the other. The sooner the politics of knowledge become a central aspect of all dimensions of research, politics, and education, the sooner we may be able to leave the global Gitmo of ideological mystification in which we are all held captive (Livesey, 1988; Weiler, 2004; Smith, 2006).

Academics, from Jean-Francois Lyotard's (1979/1984) *The postmodern condition: A report on knowledge* to diverse contemporary analyses of the nature of knowledge production, have been talking about the crisis of knowledge for decades. Lyotard linked the flood of knowledge produced in academic institutions of the 1970s to the breakdown of the Western “modernist” grand narratives. In a diverse world such narratives, Lyotard argued, had outlived their usefulness and were incapable of producing data that was not inscribed by Western epistemological traditions. While Lyotard was quite correct in his understanding of the limitations of Western knowledge work, he might not have anticipated how dramatically the crisis would intensify in the twenty-first century. With the expansion of the power and concentration of capital over the last couple of decades, scholarship and social movements have not kept up with the ways that power frameworks insidiously inscribe knowledge coming from diverse social locations (Weiler, 2004; Kincheloe, 2005b). Neither have those who serve as the guardians of the quality and rigor of research developed satisfactory ways of monitoring the production of knowledge under these ideological conditions.

In my own experience, many editors of prestigious journals in a variety of disciplines have no idea what my critical colleagues and I are talking about when we make reference to the ideological conditions under which particular knowledge is produced. Such guardians of the epistemological status quo often do not understand the episto-political factors at work in their own journals. Their ideological naiveté grants insight into the ways that critical analyses of the insidious impact of dominant power on the research act are not commonly taught in research courses in the physical sciences, the social sciences, and the humanities. When such issues of power and knowledge fall outside the purview of the profes-

sional awareness of scholars sufficiently prominent to edit prestigious journals, we know that a regressive, hegemonic politics of knowledge is accomplishing its goals. Those corporate advocates of privatization and empire may not be winning in Iraq, but they are certainly finding success in their preemptive strikes in the knowledge wars.

The politics of imperial knowledge will continue to exacerbate the twenty-first century crisis of knowledge until Western scholars, politicos, and educators begin to understand the intimacy between dominant power blocs and information as well as the cultural hegemony of monological Western epistemologies and the data they validate. Our call for diversal knowledges reemerges in this context. Until we understand the ways that power not only validates but rank orders the knowledges produced by individuals with differing amounts of academic and cultural capital, an epistemological hegemony legitimizing a political economic hegemony will only grow more acute and inhumane. Indeed, it will perpetuate and legitimate unacceptable forms of human suffering. The alienation contemporary people experience from the physical, historical, ethical, political, ecological, cosmological, ontological, and epistemological contexts of which they are intimately embedded will also continue to deepen in this episteme. The crisis of imperial knowledge leads to harder stuff, more intense problems for more and more of the planet's inhabitants.

## The Failure of Social Science: The Possibilities of New Ways of Seeing

After all the paradigmatic debate and discord surrounding the production of knowledge, the nature of epistemology and ontology, and nature of research design in the social, psychological, and educational domains, many of the issues addressed here about power, justice, empire, and the socio-cultural location of knowledge are simply not addressed in the twenty-first century. Much of the analysis involving paradigmatic typologies — e.g., positivism, post-positivism, constructivism, interpretivism, criticality, feminism, poststructuralism, etc. — have failed to adequately deal with these concerns. The effort to bring a form of crypto-positivism back to the socio-educational sciences is currently successful with the support of many Western governments and corporate interests. It will ultimately fail, however, for many reasons. One of the most surprising of these reasons is that such a recovery of positivism on many levels dismisses what future historians may see as the most important advances in twentieth-century science: the advent of complexity from Einstein's relativity (see Kincheloe, Steinberg, and Tippins, 1999), quantum physics, Heisenberg's uncertainty principle, and complexity and chaos theory and the related science of emergent properties coming from the biological and psychological work of Humberto Maturana and Francisco Varela.

Instead of focusing on the power of this complexity and multilogicality of scientific pursuit, contemporary crypto-positivists have re-adjusted their lens in

a reductionist manner. Rather than taking a cue from the insight into complexity to be drawn from the aforementioned and much other scientific work, the crypto-positivists have concentrated on the isolation of what they believe to be fixed and intractable social, psychological, and educational phenomena. The idea that things-in-the-world are in flux, always changing, in the process of becoming that is drawn from the move to complexity has been swept under the epistemological and ontological rug. Thus, a neo-mechanism has emerged that fears the recognition of epistemological, ontological, and even cosmological changes demanded by complexity and diversality. If the physical, biological, social, psychological, and education cosmos is more like an indivisible, at-first-glance imperceptible matrix of experiences in process and ever evolving relationships then a reductionist science simply doesn't work. Indeed, such a neo-positivist view of knowledge provides tobacco companies, pesticide manufacturers, pharmaceutical producers, standardized test makers, and all their political beneficiaries with a way of getting the answers they want from a "validated" (but corrupted) science.

For reductionist researchers, such words sting. The possibility of rethinking the nature of how we approach social, psychological, and educational science is a disturbing consideration for neo-positivist researchers. Obviously there are researchers who fall into the reductionist camp who are simply naïve and do not understand the epistemological, ontological, ideological, and political economic dynamics of their work. Concurrently, there are those who make conscious decisions to sell their souls to tainted money, in the process doing the bidding of their benefactors and dancing to the devil's fiddle. As I write these words, I know I will not win the Miss Congeniality award in the world of research. I want to make clear I am not lumping all researchers who disagree with me about the complex and complicated domain of knowledge production into the categories of naïve scholars or playmates of the corporate devils. Obviously, there are brilliant, socially conscious researchers who profoundly disagree with me and go about doing first-rate research in ways very different than mine. Still, the epistemological and ideological bastardization of research practices in a variety of domains is a reality that cannot be ignored.

In addition to the complexity-based scientific traditions I have previously referenced, numerous other researchers over the last century have laid a foundation for many of the arguments presented here about the failures of social, psychological, and educational inquiry. John Dewey's (1916) challenge to positivism in the first decades of the twentieth century with his epistemological and ontological questions about the reality of intractable and timeless truths has influenced so many researchers and educators, me included. Obviously, in a critical theoretical essay the work of Max Horkheimer (1974), Theodor Adorno (1973), Herbert Marcuse (1955), and Walter Benjamin (1968) from the Frankfurt School from the 1920s to the 1960s is central in understanding the oppressive uses to which positivist modes of inquiry have been put. Antonio Gramsci's (1988) work in Mussolini's fascist prisons in the 1920s and 1930s against hegemony and his insights

into to transformative role of the organic intellectual are key aspects of the critical research tradition.

Of course, the anti-colonial revolutionary ideas articulated so profoundly by Franz Fanon (1963) and Albert Memmi (1965) that so powerfully influenced the emergence of the Civil Rights Movement, the women's movement, the queer rights movement and the challenges to reductionist scholarly knowledge these collectives inspired constitute a central thread in development of critical knowledge work in the twenty-first century. Indeed, the work of those involved with the post-discourses and postcolonialism are central dimensions of the body of insights on which contemporary criticalists draw. Running this work through the filter of feminist scholars such as bell hooks (1981), Gayatri Spivak (1987), Patricia Hill Collins (1991), Vandana Shiva (1993), and Sandra Harding (1986) to name only a few, a powerful multidimensional canon of critique begins to emerge.

This canon — including the previously mentioned scholars and many, many other critical knowledge workers around the world — have generally argued that Western reductionist sciences have rarely produced knowledge that was in the best interests of the casualties of Western colonialism and numerous other forms of racial, class-based, gender, sexual, religious, and physical ability-related oppression. These aforementioned scholars all understood from diverse cultural, theoretical, and epistemological perspectives that something was egregiously wrong with the reductionist knowledges produced by Western and Western-influenced scholars. Providing only narrow strips of decontextualized information on a topic, such knowledges often missed the larger epistemological and ideological forest for the cultural trees in front of them. In such a knowledge cosmos, great damage was and continues to be done to those in the most vulnerable situations. The consistency of such scientific damage over the decades is disconcerting, as too many scholars/researchers have failed to learn the lessons the previously mentioned knowledge producers taught. The knowledge wars never seem to end.

As the knowledge wars continue, the U.S./Western empire continues to fall deeper and deeper into the epistemological, ideological, ethical, cultural, sociopolitical, psychological, and pedagogical abyss. The machine metaphors of Western Cartesian-Newtonian-Baconian epistemology and ontology persist in the work of the crypto-positivists and the dead universe they promote. Individuals reared in an educational domain grounded on a thanocentric cosmology struggle to existentially survive, reaching out to fundamentalist Christianity, Judaism, Islam, New Age mysticism, or the contents of an ever-growing pharmacopoeia to "enliven," to bring something transcendent into their daily lives. While many of these individuals are shielded from educational experiences that would help them articulate their alienation, they intuitively sense that there is something crucial missing from the world machine metaphor permeating the socio-cultural, psychological, and political dimensions of their lived worlds. Thus, understandably, they are put off by political discourse, rigorous theological inquiry, and education as it generally exists in the contemporary era. They are searching for meaning and

engaging affective experiences. Such dynamics are generally not to be found in these domains. At least fundamentalist religion provides affective stimulation in a world where the “experts” too often promote deadening, thanocentric “expertise.” Yet at the same time this neo-Marcusean thano-virus morphs into its twenty-first century configuration, we know that there is an alternative to such ways of seeing and being in the world. While by no means does criticality offer an “answer” to ultimate human questions or “salvation” in any sense of the term, it does provide us a different and *less mad path* than the one being followed and promoted by many Westerners and their dominant social institutions. Make no mistake, human beings are existentially condemned to a life without final answers and ultimate revelations of meaning — that is just part of life on earth. We have to simply get used to the uncertainty and ambiguity of the human condition.

As we accept the inevitability of uncertainty and ambiguity in light of epistemological, ontological, and cosmological complexity, we can also begin to explore with the help of the critical bricolage vis-à-vis diversality an alternative view of the nature of the cosmos and our role in it. Grounded on a critical theoretical commitment to social justice, anti-oppressive ways of being, and new forms of connectedness and radical love, we can help set in motion an analysis of the universe not as a lifeless machine but as a living cognitive process that is changeable and ever connected to human consciousness. Most great theological traditions have at some point in their history pondered this notion of cosmological intelligence, but now it is becoming a more important dimension of complexity-grounded physical sciences — physics and the life sciences in particular. Here life is connected to the cognitive ingenuity embedded in the cosmos. Here creativity and historically significant work become important in an ontology of becoming. In this living universe, the inner world of consciousness is never unconnected to physical cosmos we see around us (Prigogine and Stengers, 1984; Prigogine, 1996). Developing a variety of sociopolitical, economic, ethical, aesthetic, cognitive, and educational ways to put these ideas into action is the challenge of the twenty-first century — a charge central to our survival.

Thus, the more we know about positivism and its contemporary hidden strain, the better able we are to get beyond a static existence and more into a dynamic and erotic becoming. In addition, such knowledge empowers us to understand that positivism is not misguided simply because it presents a deceptive picture of the physical and social worlds. As if that wasn’t enough, positivism and the culture it constructs around it are grounded on an indefensible epistemology, ontology, and cosmology — of course, I could add axiology, teleology, and ethics to this list as well. Indeed, positivism’s view of the nature of humanness and life itself is highly problematic. Mechanistic, positivistic ways of viewing the world and ourselves has led and is leading us down a primrose path to great human suffering and planetary destruction. In the twenty-first century Imperial Court of Corporate Greed and Knowledge Control, criticalists must be the ones who expose the corruption and deception.

As critical pedagogues we must gain the ability to look at the world anew and ask completely different questions about it — questions that expose what's going on at diverse levels of reality and the way these events influence the lived world. It is only at this juncture that we can produce knowledges that alert the world to the understanding that "reality" is not exactly what it appears to be. Crypto-positivists are trapped in a never-ending game of three hand monty with its delusions of "normal" ways of seeing that use the name of neutrality to conceal the machinations of power. Using our multiperspectival methodologies, we begin to reframe our windows on the world in a way that allows us not only to view diverse dimensions of reality in different ways but that also permits to resituate the problems that confront us. As I look at the way, for example, the U.S. and many of its Western allies have dealt with Iran over the last several decades, I appreciate multiple ways of seeing the web of colonial and political economic relationships that has shaped mainstream knowledge production and policies toward the nation.

It is absurd to ignore this web of interactions that have led us to this particular point in diplomatic history. The ever-worsening relations between the U.S. and Iran represent a failure of imperial ambitions, economic greed, and ways of producing knowledge that help us understand the larger dynamics at work in this situation (see Kincheloe, 2004 for an expansion of these ideas). Thus, we fall back into our crypto-positivist trap of limited ways of seeing. Critical pedagogy with its critical bricolage vis-à-vis diversality in its concern with multiple perspectives and divergent forms of power identifies the normalizing voices that "naturalize" dominant perspectives and invalidate the views of the "other," the marginalized. The ability of positivism to exclude a wide variety of information and experiences from consideration is one of the keys to its success as an invaluable partner to the dominant power blocs over the past couple of centuries. Crypto-positivism continues this tradition undercover and more effectively in the twenty-first century wars. Critical pedagogy in this unfortunate state of affairs delivers a jolt to dominant epistemologies and the empire's politics of knowledge (Falconer and Williams, 1987; Livezey, 1988; Pickering, 1999; Nelson, 2000).

### **Lost: Losing Connection Even in the Age of the World Wide Web — Our Misplaced Sense of Purpose**

No matter how much traditional modes of science have learned about the physical world, humans are still children in the effort to understand the workings of the cosmos. In the world of physics and biology — just to mention a couple of physical scientific disciplines —, there are so many things about the structure and workings of the universe as well as the nature of the life process that elude experts. The same could be said of any scientific domain, where the notion of interconnection and purpose gives way to positivism's ontological delusion of separateness — of things-in-themselves, not things-in-connection or things-in-relationship. It takes ideological and intellectual fortitude to challenge the knowledge warriors of

crypto-positivism. We know they will hit back every time with challenges to the legitimacy of one's scholarly or cultural work.

Young criticalists must prepare themselves for attacks from those who would deny them tenure, question the purpose of their pedagogy, use their work in criticality as exhibits of their potential criminality in trials and legal proceedings, and publicize their efforts in public media as dangerous challenges to community values and Western civilization itself (all of these are actual examples). Indeed, critical pedagogy is not for the faint of heart. I can't help but find nasty humor in mainstream scholars telling criticalists to quit using provocative language (such as the kind I'm using right now), while they destroy the lives of critical scholars or stand silently by while some of the previously referenced assaults take place. But to be provocative, this is often the modus operandi of the academic bourgeoisie who many times have no problem with people destroying other people's lives and careers as long as the demolition is carried out with a low affect, a quiet voice, and a faint smile on one's face.

I fervently believe in the importance of education and the research mission of the university. Such pedagogy and knowledge work help shape the consciousness of people both directly and indirectly connected to educational institutions. If such work were not important, there wouldn't be so many efforts to counter the work of criticalists. Thus, in an era of knowledge wars, the contested space of critical pedagogy and the knowledge it produces takes on a consequence greater than before. In the purposeless world of crypto-positivism, the effort to address human suffering and the power asymmetries that continue to expand or the consideration of critical notions of affective investment and radical love are quite out of place. Such commitments can be held in private, but they have no place in the objective and covert world of crypto-positivism. Critical research takes place outside the matrix of global domination and, in this locale, works to expose and respond to the dominant power wielders' brutal operations justified under the flag of verified truth (Pickering, 1999; Smith, 2006; Monchinski, 2007). In the positivist universe, the notion of critical transformation of unacceptable social conditions is not relevant to those researchers who operate around such horror.

Critical researchers have a passion for social justice in research that transcends reductionistic modes of distancing and disinterestedness. This means that we must challenge forms of knowledge that are presented to us as value-free. Concurrently, we must also challenge the removal of humanness from objectivist knowledges that are deployed in the world. I have long been fascinated by the use of the passive voice in positivistic research, e.g., the Lwiindi ceremony of the people (Tonga tribe of Zambia) was observed with the natives dancing and giving thanks to the gods that provided a good harvest. In such a construction the human observer, the researcher, is erased in the same way a physical scientist would write in her protocols that 8.8 mls of sulfuric acid was added to 1.3 g of mixed nitroesters of nitrobenzyl alcohols. In both examples no human dimension of the research activity was present to contaminate the objective description of the

Lwiindi ceremony or the chemical process. No matter how oblivious the Western researchers may have been to the Tonga people's ways of seeing and being, they were providing an objectively true account of the harvest ritual.

What many critical, postcolonial, and indigenous researchers have of course often found in ethnographic research of this variety from every conceivable part of the world is that the original investigators had completely missed the point of the cultural practice in question. The information they provided was sometimes humorous and always offensive to the peoples under scrutiny. As Dakota Sioux singer/songwriter Floyd "Red Crow" Westerman wrote in his song, "Here Come the Anthros," the anthropologists flock to the reservation to study "their feathered freaks with funded money in their [the anthropologists'] hands." None of the money, however, Westerman writes later in the song, ever goes to the Native peoples. The purpose of such culturally oblivious, positivist-inscribed research was not to help indigenous peoples throw off the shackles of colonial or neo-colonial bondage but to provide an objective report about them.

Even in epistemological domains such as generalizability of data, the positivistic lack of purpose and the removal of humanness exhibit themselves in harmful ways. The generalizability of research involves taking that which is learned from inquiry and utilizing it in another situation. Thus, what researchers ascertain in one situation is applied to the larger population. The point in the generalization process is that which is ascertained from one population and applied to another in social, psychological, and educational science always implicates human beings in at least two different settings. The researcher simply can't remove human beings from this process. In order for generalizability to be achievable, the human agents in the new situation must be just like those in the first inquiry. Given the specific contextual construction of all human actors, it appears profoundly difficult to exchange a person in the original study with a person in the larger populace. Research that takes humanness seriously cannot take on faith the interchangeability of people coming from the two sets of subjects. Thus in this case, the removal of humanness in the name of objectivity and rigor ends up undermining the quality of the data produced (Livesey, 1988; Geeland, 1996; Tobin, forthcoming).

Such a positivist science may be incapable of adequately dealing with even the most uncomplicated dimensions of lived experience in a way that provides not only unprecedented insights into social, psychological, or educational phenomena but also useful knowledges that can improve human life. Positivism is far more comfortable exploring fragments of lived experience rather than wholes, interconnections, and meanings. The all-important scholarly act of making sense of data is more a poetic activity than a positivistic scientific one. Deriving the living meaning out of human science is a profoundly difficult task that demands exploring the micro-experiences of individuals in particular circumstances, but at the same time filtering such experiences through diverse theoretical frameworks to figure out how they might be interpreted (Van Manen, 1991; Lloyd and Smith, 2006; Pinar, 2006). This process is never simple and will never yield some facile mode

of certainty. Any physical or human science that is grounded on the quest for certainty must remove phenomena of the world and human beings from its design because such things-in-the-world are always in process and cannot by definition be described with final certainty. In the next moment, in the next interaction they engage, they are by definition something different. The metaphysics of positivism will always lead it astray.

This complex, in process, poetic dimension of all research will not be discussed in the Parliament of Positivism — the gag rule has been invoked. The poetic power of the critical researcher's imagination is a crucial dimension of difference-making research. Such creativity always stands in awe of the autopoetic dimension of the physical, biological, and social domains — the phenomenon of emergence that could be called the intelligence of the universe. Indeed, compelling critical research possesses an aesthetic dimension where researchers make use of a hermeneutic muse to help them make sense of particular situations. Artists construct their own interpretations of the world in diverse media. Such constructions can by no means be explained in any exactitude by positivist psychology or science of any kind, arising as they do from the interaction of the unconscious, a socially constructed consciousness, and a variety of other factors.

Psychoanalysis can certainly grant us some insights into the process — but by no means can it produce what positivists would label validated knowledge. Thus, some of our most compelling, life-altering, and world-changing knowledges come from parts unknown. It would seem in this context that researchers and people in general who developed a critical consciousness of the world connected to an appreciation of many of the unconscious dimensions of their psyche would be best equipped to produce brilliant knowledge and accomplish great things in the world. In the warped neighborhood of positivism, however, the idea of cultivating the poetic imagination and integrated, transformative consciousness of the researcher as a key dimension of a rigorous education is viewed as idiocy. In this and scores of other ways — a few of which referenced here — crypto-positivism crushes the sociological, psychological, and pedagogical imagination. In this context, one front of the knowledge wars involves the crusade against the scientific imagination.

### What To Do about the Wars: Dealing with Violent Knowledge When One Eschews Violence

The imperial political economic knowledge wars of the contemporary era help pave the way for criminal acts by corporations and their government allies against the poorest people around the world. In this context, I'm reminded of a public debate I had with a very personable and caring economist while I was a professor in Louisiana. Because he came from a very positivistic econometric perspective, he took issue with a statement I had made about the ethical dimensions of economics and economic policy. There is no ethical dimension to economics, he argued,

maintaining that one simply had no choice but to follow universal laws of the market. But what about the purpose of our studies of economics? I asked him. Is it simply to maximize profits of particular corporations or specific sectors of one nation's economy or is it to make sure that wealth is produced and then distributed in a way where everyone would benefit? My friend was perplexed at my question and answered that my query was not an economics question but a moral or a theological question. The two domains were separate in his consciousness and had nothing to do with one another.

Later, my friend told me that he had been very troubled by my questions because in receiving a B.A., M.S., and Ph.D. in economics he had never been confronted with or thought about such issues — and that really disturbed him. He had compartmentalized his life; he was an economist in one dimension of his life, and in another he was a compassionate man who sincerely cared about the welfare of his fellow human beings. How could it be, he asked me, that the twain never met? How could he be “indoctrinated” (his word) in a way that convinced him that there were no ethical dimensions of the “dismal science”? One doesn’t have to be a genius to anticipate what I said to him. I hope I didn’t overdo it, but I gave him a treatise on the politics of knowledge and epistemology. It’s in the interests of corporate power wielders, I told him, to keep economists from thinking of these dynamics. And it’s more than coincidental, I speculated, that positivist modes of economics keeps “facts” and “values” so neatly separate. How, we both wondered, could one obtain three academic degrees in economics and not deal with these issues?

In this interaction with my friend rests a micro-manifestation of some of the macro-issues dealt with in this essay. The economist was a good man but had been academically “reared” in a culture where positivist assumptions were the only game in town. Economics was defined without challenge in his experience as the study of markets and profit making and he had never imagined another way of viewing the field. The idea of who was hurt by such ways of seeing was simply never raised in such a positivistic culture. How do we deal with similar circumstances in other fields such as psychology and education? Do we continue to educate scholars devoid of soul and civic courage? Do we continue to ignore the violent inscriptions on much of the knowledge that’s produced in the social, political, economic, psychological, and pedagogical domains? How do we “fight” in these knowledge wars when we hate the notion of fighting? These are some of the challenges that face proponents of critical pedagogy in the last years of the first decade of the twenty-first century.

The logic and power of capital and its willingness to hurt whoever gets in the way of quarterly profit margins never ceases to amaze me. I am even more amazed that the educational cronies of dominant power blocs are willing to destroy lives of teachers and students while subverting critique of practices that lead to injustice and human suffering to the name of objectivity and neutrality — or, even worse, doing so with their institutional mission statements saturated with

the language of democracy and social justice. To all of those courageous critical pedagogues who expose these travesties without allies or supporters in diverse educational and social institutions, I hope you know how much many of us appreciate your unrewarded work. Many of us have felt that sense of being alone, of questioning our own sanity, as superiors in the hierarchy deem the critical work we do as a form of social pathology and an insult to the academy. This is the socio-psychological and phenomenological dimension of the knowledge wars. I hope in this dark hour that critical pedagogy has the intellectual and political facility to change the course of history.

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